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The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 18

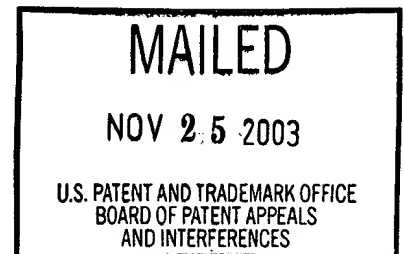
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NAOHITO TOMOE

Appeal No. 2002-1129
Application 09/225,245¹

ON BRIEF



Before JERRY SMITH, BARRETT, and BLANKENSHIP, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1, 2, 12, and 13. Claims 10 and 11 stand allowed and claims 3-9 and 14-20 have been indicated to be directed to allowable subject matter.

We affirm.

¹ Application for patent filed January 4, 1999, entitled "Device for and Method of Detecting Interference Waves," which claims the foreign filing priority benefit under 35 U.S.C. § 119 of Japanese Applications 10-218350, filed July 31, 1998, and 10-349132, filed December 8, 1998.

BACKGROUND

The invention relates to a device and method for detecting interference waves, as may be understood from claim 12 reproduced below and the description in the specification at page 25, line 12, to page 31, line 26.

12. A method of detecting interference waves, comprising the steps of:

converting data to be transmitted from a base station into a radio signal of a predetermined transmission frequency, and transmitting said radio signal to a mobile station;

receiving a radio signal lying within a certain reception band of frequencies including a predetermined reception frequency from said mobile station; and

in order to detect an interference wave signal lying within a certain transmission band of frequencies including said predetermined transmission frequency, stopping the transmission of said radio signal of the predetermined transmission frequency to said mobile station and receiving said interference wave signal.

The examiner relies on the admitted prior art (APA) of appellant's Fig. 11, discussed on pages 1-5 of the specification, and on the following reference:

Yoshimi et al. (Yoshimi) 5,603,093 February 11, 1997

Claims 1, 2, 12, and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshimi and the APA.

We refer to the final rejection (Paper No. 5) (pages referred to as "FR__") and the examiner's answer (Paper No. 11)

(pages referred to as "EA__") for a statement of the examiner's rejection, and to the brief (Paper No. 10) (pages referred to as "Br__") and reply brief (Paper No. 12) (pages referred to as "RBr__") for a statement of appellant's arguments thereagainst.

OPINION

The claims are grouped to stand or fall together (Br7).
Claim 12 is discussed as representative.

Initially, we note that there is some disagreement about whether claim 1 recites detecting an interference wave signal on a downlink channel from a base station to a mobile station. Although this does not impact the analysis, we address the issue for completeness. The examiner states that claim 1 only recites detecting an interference wave signal, not an interference wave signal on a downlink channel from the base station to the mobile station (EA3). It is true that the claims only recite detecting an interference wave signal at a predetermined transmission frequency and do not mention a "downward channel from the base station to the mobile station." Nevertheless, a downward channel is defined as a transmission channel from the base station to the mobile station, so the transmission of a predetermined transmission frequency from a base station in claim 12 is a "downward channel" although not expressly referred to as such.

The examiner finds that the background of Yoshimi discloses, at column 1, line 61, to column 2, line 12, that it was known to

stop the transmission signal from the base station so that the interference signal can be measured (FR2). The examiner does not rely on Yoshimi's invention. The examiner finds that Yoshimi does not expressly disclose transmitting means and receiving means, but that the APA discloses an interference wave detecting device which is disposed at a base station and includes transmitting and receiving means (FR2). The examiner concludes that it would have been obvious to implement the technique of Yoshimi with the structure of the APA (FR2-3).

Appellant argues that Yoshimi teaches away from the present invention. It is argued that while Yoshimi discloses that in a conventional system, in order to check the state of interference waves of radio channels of the same frequency in different zones, the transmission of radio waves from the base station of the zone to be checked had to be stopped, Yoshimi explains that in such a conventional system the transmission cannot be frequently stopped while the system is in service, and as a result a long amount of time is required to measure field intensities from other base stations (Br8). It is argued that "Yoshimi thus teaches away from stopping base station radio wave transmission as a method of detecting interference waves, by proposing a method wherein a mobile station measures the field intensity and quality of a downlink radio wave from a base station and reports the measured results back to the base station at regular intervals" (Br8-9).

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Appellant argues that it is improper for the examiner to rely only on the background of Yoshimi because this does not consider the prior art as a whole (RBr2).

It is noted that the examiner applies the APA only to show structure to support the "means" limitations in claim 1, which is not necessary for the method of claim 12. We agree with the examiner that Yoshimi does not teach away from the present invention. "A reference may be said to teach away when a person of ordinary skill, upon [examining] the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." In re Gurley, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994). That the conventional method disclosed in Yoshimi has disadvantages because of the time it takes does not indicate that it does not work. In fact, since there appears to be no difference between the conventional method disclosed in Yoshimi and the method recited in claim 12, it is hard to see why appellant thinks he is entitled to patent the prior art method in Yoshimi. It is axiomatic that a reference must be considered in its entirety. However, all of the disclosures in a reference, including non-preferred embodiments, "must be evaluated for what they fairly teach one of ordinary skill in the art." In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). "[T]he fact that a specific [embodiment] is

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taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered." Merck & Co. v. Biocraft Labs., Inc., 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989), quoting In re Lamberti, 545 F.2d 747, 750, 192 UPSQ 278, 280 (CCPA 1976). Here, the prior art method disclosed in the background of Yoshimi is similar to an unpreferred embodiment. Because Yoshimi does not teach away from the present invention, the rejection of claims 1, 2, 12, and 13 is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Jerry Smith
JERRY SMITH

JERRY SMITH
Administrative Patent Judge

Lee E Bennett

LEE E. BARRETT
Administrative Patent Judge

Howard B. Blankenship

HOWARD B. BLANKENSHIP
Administrative Patent Judge

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